

REMARKS

Receipt of the Office Action of April 16, 2004 is gratefully acknowledged.

Claims 1 - 4 were presented for examination. These were rejected as follows: 1) claims 1 and 3 as anticipated under 35 USC 102(b) by Vander Heyden, and 2) claims 2 and 4 as unpatentable under 35 USC 103(a) over Vander Heyden in view of Flecher-Heyden.

Both rejections have been carefully considered. It is respectfully submitted, however, that claims 1 - 4 are patentable over these references. These rejections are therefore respectfully traversed.

The invention described and claimed in this application is to a flowmeter which is suitable for the replacement of differential pressure flow meters which are in wide use today. As noted beginning at the bottom of page 2 and continuing onto page 3 of the specification, differential pressure flowmeters have a number of disadvantages, and the present invention serves to overcome these disadvantages. And in spite of the reluctance to replace the differential pressure flowmeters because to do so is costly, the present invention offers a solution without the high costs.

The flowmeter according to the present invention produces a signal that is proportional to the flow rate of the fluid or the square of the flow rate. This allows the user to replace the old differential pressure flowmeter with one according to the present invention. With the flowmeter according to the present invention, the user can choose the output to be proportional to the flow rate or the square of the flow rate.

Vander Heyden discloses a flow measurement device having an ultrasonic flowmeter and pressure and weight sensors. In col. 13, lines 55 - 59, cited by the examiner, Vander Hayden mentions producing a signal that is proportional to the flow rate calculated by the

computer 16. Vander Hayden does not mention producing a signal proportional to the flow rate *or* the square of the flow rate.

Since claim 1 defines a flowmeter having a signal processing unit which produces *a signal proportional to the flowrate or the square of the flowrate*, it cannot be anticipated by Vander Hayden cannot, it is respectfully submitted, anticipate claim 1 because he does not disclose, in clear terms, a structure capable of producing the result noted. Vander Hayden simply does not disclose a signal processing unit like that claimed in claim 1. This conclusion applies to claim 4 as well.

Neither the problem addressed by the present invention, nor the solution proposed by the present invention can be found in Vander Hayden.

Fletcher Heynes discloses a flowmeter comprising an electronic control unit for calculating a desired fluid flow parameter, such as the flow rate, which is preferably equipped with a data input device (keyboard 16) and through which it may be supplied with user selectable constants and mode control commands (see col. 8, lines 47 - 55). Fletcher Heynes states that his invention measures the *rate of flow of breadth, i.e., to ultrasonic spirometers*. This type of device is never to be found in process control units commonly used on industrial sites. They are instead, isolated devices which operate independently, so that the problem of extensive and costly reprogramming of the process control units does not occur. Like Vander Hayden, Fletcher Heynes does not disclose producing an output corresponding to the square of the flow rate.

Allowing the output to be set to the flow rate or the square of the flow rate, allows the user to replace a differential pressure flow meter inexpensively. Vander Hayden and Fletcher Heynes provide no assistance in this regard.

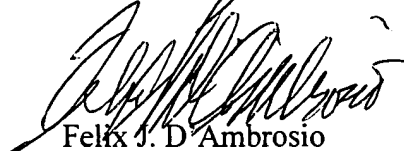
Claim 1 defines over the references applied for the reason stated above.

To complete the definition of the present invention, new claims 5 - 8 have been presented, which modifies but does not change the definition of the invention. New claims 5 - 8 also define patentably over the noted two references.

It is respectfully submitted that claims 1 - 8 define over the applied references as well as over all the references of record.

In view of the foregoing, reconsideration and re-examination are respectfully requested and claims 1 - 8 found allowable.

Respectfully submitted,



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